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(Interim)

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1 pages, 2 tables and
1 figures.

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STUDIES ON SALIVATION

Recent progress in the studies on salivation will be presented herewith in the form of a brief interim report because of the fact that statistical analysis of a full set of experimental data has not yet been completed. The summary data, together with their statistical analysis, will be incorporated in full in the next bimonthly report.

The previous report (No. 12) established that sex, days and frequency during each day, are important factors affecting the rate of base-salivation in mice. It was further found that the largest single factor contributing to variability came from differences in base-salivation among individuals. The suggestion was made that, from the standpoint of standardization, a pre-selection of mice for salivation studies might be very worthwhile.

We have followed up this suggestion. Four additional experiments were performed in analogy to the experiment reported previously. Thus, we now have expanded the data on base-salivation to 170 mice, salivated once, twice, three, four or five times for at least four consecutive days. These salivation data will establish firmly:

- a. how much of the total variability in base-salivation can be attributed to individuals;
- b. They will allow the examination of any possible correlations between base-salivations on the first day and "total salivation", the knowledge of which can subsequently be used for efficient pre-selection of mice for base-salivation;
- c. They will provide quantitative information on the reproducibility of base-salivation at different times for high-, intermediate- and low-salivating mice.

It is expected that the above-mentioned analyses of the salivation data will aid in the standardization of base-salivation in mice and will greatly improve the efficiency of subsequent studies where the effects of atropine and/or smoke are investigated.

The results of the statistical analysis of the accumulated data, together with new information on some of the effects of atropine upon salivation, will be the basis of our next more substantial report.

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